

I claim:

1. A multifunction vehicular surface cleaning system comprised of pipe, soap box and switcher; wherein, said soap box is located on the outside of said pipe at the inlet end of the pipe with the its outlet; said switcher is correspondently set upon the outlet of the soap
5 box and the inlet of the pipe, so that by turning said switcher the system can be shifted in cut-off said input pipe with soap box and output pipe, or cut-in the input pipe to output pipe directly only, or cut-in the input pipe to both the output pipe and the soap box, in order to carry out three working states of cut-off, or spraying clear water or soap water; said switcher is typically comprised of valve, baffle, rotating switcher and seal rings, therein the valve has
10 an eccentric pocket connecting with the output pipe throughout, coordinating to the eccentric pocket of the valve said baffle has a water hole built up for connecting to the eccentric pocket as turning in a proper position, said rotating switcher has a through-hole set upon for connecting the water hole of the baffle to the inlet of said pipe throughout, and a by-pass hole for connecting to the outlet of the soap box as turned in a proper position; for avoiding
15 leaking, proper number of seal rings are set up between all touching components.

2. A multifunction vehicular surface cleaning system as claimed in claim 1, wherein, said soap box extends out a mounting base from the front outside end for placing the switcher in; said switcher is mounted in the base and located by a retainer.

3. A multifunction vehicular surface cleaning system as claimed in claim 2,
20 wherein said a shifting lever making the valve, the baffle and the rotating switcher turn extended out from a notching slot of said base of the soap box for facilitating to shifting operation.

4. A multifunction vehicular surface cleaning system as claimed in claim 3,
25 wherein a knob is mounted on said base so that the extended end of the shifting lever is inserted into said knob, by turning the knob the shifting lever can make the valve, the baffle and the switcher turn relatively.

5. A multifunction vehicular surface cleaning system as claimed in claim 1,
30 wherein the baffle of the switcher has a central hole built on for fitting in a sealed connection shaft downward; said connection shaft is separately fastened on the valve and the rotating switcher with two proper ends so that said valve and the rotating switcher can be simultaneously turned.

6. A multifunction vehicular surface cleaning system as claimed in claim 5, wherein a shifting lever is mounted on the rotating switcher, when sliding the shifting lever fixed on said rotating switcher, said valve and the rotating switcher can be turned simultaneously.

5 7. A multifunction vehicular surface cleaning system as claimed in claim 5, wherein said valve of the switcher has a T-shaped section crossly, in which the vertical bar is said connection shaft; the top end of said connection shaft is fit into the central hole of the baffle and sealed with a seal ring on the joint portion, and the another end is fastened on the rotating switcher so that the valve and the rotating switcher can be moved simultaneously.

10 8. A multifunction vehicular surface cleaning system as claimed in claim 5, wherein said connection shaft has a flat bottom end, coordinating to the flat end of the connection shaft, the rotating switcher has a retaining slot for holding the flat bottom end of the connection shaft.

15 9. A multifunction vehicular surface cleaning system as claimed in claim 1, wherein said baffle has an H-shaped cross-section, which is sandwiched by the valve and the rotating switcher; the H-shaped baffle has a lug set upon the outside for sliding and fitting into the axial slot on the inside wall of the base.

20 10. A multifunction vehicular surface cleaning system is typically comprised of pipe, soap box and switcher; wherein, a hollow brush is connected to the outlet of output pipe in socket joint, and there are some water gates on bottom base of the brush for facilitating to cleaning operation directly.